

Remarks

The Office Action mailed March 30, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-30 are pending in this application. Claims 1-30 stand rejected.

The rejection of Claims 1-30 under 35 U.S.C. § 102(e) as being anticipated by Makivic (U.S. Patent No. 6,061,662) is respectfully traversed.

Applicants respectfully submit that Makivic does not describe or suggest the claimed invention. As discussed below, at least one of the differences between the cited reference and the present invention is that Makivic does not describe or suggest a computer-implemented method for determining for a user a winning bid, at an optimal bid price, for a sealed bid auction that includes using a computer to determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets, selecting by the user a bid value for the at least one tranche for comparing against a random sample of competing bid values, and randomly sampling the statistical distribution of possible competing bid values to generate one possible auction scenario.

Moreover, Makivic does not describe or suggest determining a probability that the user selected bid value is greater than the randomly sampled competing bid values included in the auction scenario. Rather, Makivic describes a simulation method and system for valuating derivative financial instruments.

Makivic describes a Monte Carlo system and method for the pricing of financial instruments such as derivative securities. A path-integral approach is described that relies upon the probability distribution of the complete histories of an underlying security. A Metropolis algorithm is used to generate samples of a probability distribution of the paths (histories) of the security. Complete information on the derivative security is obtained in a single simulation, including parameter sensitivities. Multiple values of parameters are also obtained in a single simulation. The method is applied in a plurality of systems, including a parallel computing

environment and an online real-time valuation service. The method and system also have the capability of evaluating American options using Monte Carlo methods.

Claim 1 recites a computer-implemented method for determining for a user a winning bid, at an optimal bid price, for a sealed bid auction wherein the method is implemented using a computer coupled to a database, the method includes “using the computer to determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets...selecting by the user a bid value for the at least one tranche for comparing against a random sample of competing bid values...randomly sampling the statistical distribution of possible competing bid values to generate one possible auction scenario...and determining a probability that the user selected bid value is greater than the randomly sampled competing bid values included in the auction scenario.”

Makivic does not describe or suggest a computer-implemented method for determining for a user a winning bid, at an optimal bid price, for a sealed bid auction that includes using the computer to determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets, selecting by the user a bid value for the at least one tranche for comparing against a random sample of competing bid values, randomly sampling the statistical distribution of possible competing bid values to generate one possible auction scenario, and determining a probability that the user selected bid value is greater than the randomly sampled competing bid values included in the auction scenario.

More specifically, Makivic does not describe or suggest using a computer to determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets, randomly sampling the statistical distribution of possible competing bid values to generate one possible auction scenario, and determining a probability that the user selected bid value is greater than the randomly sampled competing bid values included in the auction scenario.

Rather, Makivic describes a simulation method and system for valuating derivative financial instruments. Although Makivic describes a Monte Carlo system and method for the pricing of financial instruments such as derivative securities, Makivic does not describe or suggest randomly sampling a statistical distribution of possible competing bid values to generate

one possible auction scenario, and then determining a probability that a user selected bid value is greater than the randomly sampled competing bid values. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Makivic.

For at least the reasons set forth above, Claim 1 is submitted to be patentable over Makivic.

Claims 2-10 depend from independent Claim 1. When the recitations of Claims 2-10 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-10 likewise are patentable over Makivic.

Claim 11 recites a system for determining a winning bid, at an optimal bid price, for a sealed bid auction for tranches of asset portfolios, the system includes a server configured with a database of asset portfolios, and at least one client system connected to the server through a network, wherein the server is configured to “determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets...select a bid value for the at least one tranche for comparing against a random sample of competing bid values...randomly sample the statistical distribution of possible competing bid values to generate one possible auction scenario...and determine a probability that the selected bid value is greater than the randomly sampled competing bid values included in the auction scenario.”

Makivic does not describe or suggest a system for determining a winning bid, at an optimal bid price, for a sealed bid auction for tranches of asset portfolios, wherein the system includes a server configured to determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets, select a bid value for the at least one tranche for comparing against a random sample of competing bid values, randomly sample the statistical distribution of possible competing bid values to generate one possible auction scenario, and determine a probability that the selected bid value is greater than the randomly sampled competing bid values included in the auction scenario.

More specifically, Makivic does not describe or suggest a server configured to determine a statistical distribution of possible bid values from competing bidders for at least one tranche

included within a portfolio of assets, randomly sample the statistical distribution of possible competing bid values to generate one possible auction scenario, and determine a probability that the selected bid value is greater than the randomly sampled competing bid values included in the auction scenario.

Rather, Makivic describes a simulation method and system for valuating derivative financial instruments. Although Makivic describes a Monte Carlo system and method for the pricing of financial instruments such as derivative securities, Makivic does not describe or suggest randomly sampling a statistical distribution of possible competing bid values to generate one possible auction scenario, and then determining a probability that a user selected bid value is greater than the randomly sampled competing bid values. Accordingly, Applicants respectfully submit that Claim 11 is patentable over Makivic.

For at least the reasons set forth above, Claim 11 is submitted to be patentable over Makivic.

Claims 12-20 depend from independent Claim 11. When the recitations of Claims 12-20 are considered in combination with the recitations of Claim 11, Applicants submit that dependent Claims 12-20 likewise are patentable over Makivic.

Claim 21 recites a computer for determining a winning bid, at an optimal price, for tranches of asset portfolios that include a database of asset portfolios, wherein the computer is programmed to “determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets...select a bid value for the at least one tranche for comparing against a random sample of competing bid values...randomly sample the statistical distribution of possible competing bid values to generate one possible auction scenario...and determine a probability that the selected bid value is greater than the randomly sampled competing bid values included in the auction scenario.”

Makivic does not describe or suggest a computer for determining a winning bid, at an optimal price, for tranches of asset portfolios as recited in Claim 21. More specifically, Makivic does not describe or suggest a computer programmed to determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of

assets, randomly sample the statistical distribution of possible competing bid values to generate one possible auction scenario, and determine a probability that the selected bid value is greater than the randomly sampled competing bid values included in the auction scenario.

Rather, Makivic describes a simulation method and system for valuating derivative financial instruments. Accordingly, Applicants respectfully submit that Claim 21 is patentable over Makivic.

For at least the reasons set forth above, Claim 21 is submitted to be patentable over Makivic.

Claims 22-30 depend from independent Claim 21. When the recitations of Claims 22-30 are considered in combination with the recitations of Claim 21, Applicants submit that dependent Claims 22-30 likewise are patentable over Makivic.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-30 be withdrawn.

The rejection of Claims 1-10 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is respectfully traversed.

The Office Action suggests at pages 3 and 4 that “Claims 1-10 do not recite any structure or functionality to suggest that a computer performs the recited claims...Thus, Claims 1-10 are rejected as being directed to non-statutory subject matter.” Applicants respectfully traverse this suggestion. However, Applicants have amended Claim 1 to address the rejection set forth in the Office Action.

More specifically, Applicants submit that the claims of the present patent application are directed to practical applications in the technological arts. “Any sequence of operational steps can constitute a process within the meaning of the Patent Act so long as it is part of the technological arts.” *In re Musgrave*, 431 F.2d 882 (C.C.P.A. 1970). For example, independent Claim 1 is a computer-implemented method for determining a winning bid, at an optimal bid price, for a sealed bid auction. Applicants submit that determining a winning bid, at an optimal

bid price, for a sealed bid auction is a useful process that is considered to be within “the technological arts”.

One specific example of such a method implementation is a computer with a processor programmed to determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets, select a bid value for the at least one tranche for comparing against a random sample of competing bid values, randomly sample the statistical distribution of possible competing bid values to generate one possible auction scenario, and determine a probability that the selected bid value is greater than the randomly sampled competing bid values included in the auction scenario. While the claims are not limited to the specific examples related to a computer with a programmed processor, the claims need not be so restricted to satisfy the requirement of Section 101.

Applicants further traverse the assertion included in the Office Action that Claims 1-10 are directed to non-statutory subject matter under Section 101 in light of the “Examination Guidelines for Computer-Related Inventions”. The Examination Guidelines for Computer-Related Inventions provides in relevant part as follows:

In order to determine whether the claim is limited to a practical application of an abstract idea, Office personnel must analyze the claim as a whole, in light of the specification, to understand what subject matter is being manipulated and how it is being manipulated. During this procedure, Office personnel must evaluate any statements of intended use or field of use, any data gathering step and any post-manipulation activity....Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under § 101. Further, when such a rejection is made, Office personnel must expressly state how the language of the claims has been interpreted to support the rejection.

Applicants respectfully submit that Claim 1 is limited to a practical application in the technological arts. Furthermore, Applicants respectfully submit that the Office Action does not expressly state how the language of Claim 1 supports the Section 101 rejection.

Claim 1 has been amended. Claim 1 recites a “computer-implemented method for determining for a user a winning bid, at an optimal bid price, for a sealed bid auction”. Thus, Applicants submit that Claim 1 is directed to a useful process that is considered to be within “the technological arts”. Furthermore, Claim 1 recites a “computer-implemented method for

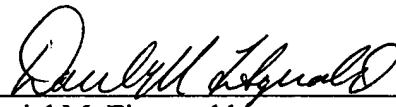
determining for a user a winning bid, at an optimal bid price, for a sealed bid auction, the method implemented using a computer coupled to a database". The method includes "using the computer to determine a statistical distribution of possible bid values from competing bidders for at least one tranche included within a portfolio of assets". Thus, Claim 1 uses a computer system to perform certain steps of the process. Claim 1 is therefore directed to a practical application in the technological arts.

Dependent Claims 2-10 depend from independent Claim 1, and these dependent Claims are submitted to satisfy the requirements of Section 101 for the same reasons set forth above with respect to independent Claim 1.

For at least the reasons set forth above, Applicants respectfully request that the Section 101 rejection of Claims 1-10 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



Daniel M. Fitzgerald
Registration No. 38,880
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070